

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
5 August 2004 (05.08.2004)

PCT

(10) International Publication Number
WO 2004/064644 A1

(51) International Patent Classification?: **A61B 8/00**

(21) International Application Number:
PCT/KR2004/000077

(22) International Filing Date: 17 January 2004 (17.01.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2003-0003218 17 January 2003 (17.01.2003) KR

(71) Applicant and

(72) Inventor: **PARK, Hee-Boong** [KR/KR]; 307-705 Shinsung APT, Sunae-dong, Sungnam-si, Gyunggi-do 463-020 (KR).

(74) Agent: **CHO, Han-Yong**; #205, Bubjun Bldg., 81-6, Wonchun-dong, Paldal-gu, Suwon-si, Gyunggi-do 442-380 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

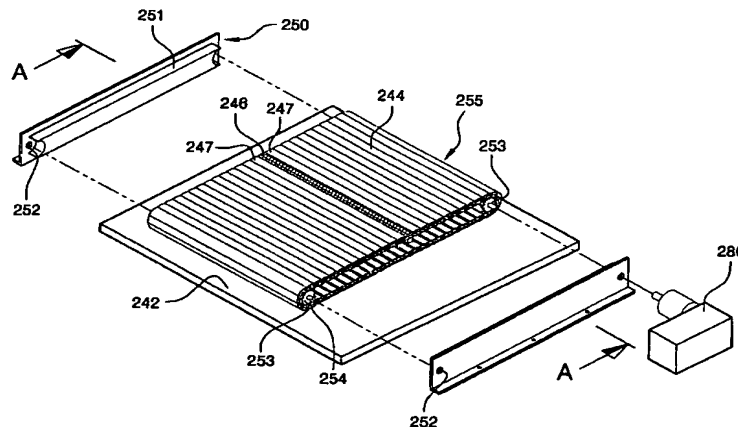
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS FOR ULTRASONIC EXAMINATION OF DEFORMABLE OBJECT



(57) Abstract: The present invention relates to an apparatus for an ultrasonic examination of a deformable object, particularly, the breast. More particularly, the present invention relates to an apparatus capable of performing an ultrasonic examination by moving an ultrasonic probe while maintaining the position and shape of a deformable object to be inspected. That is, the present invention relates to an apparatus capable of performing an effective ultrasonic by scanning an entire deformable object such as the breast at one time using a movable ultrasonic probe. The apparatus of the present invention comprises a supporting frame; a movable means which has a flat surface with rigidity widthwise on which the deformable object is placed and is installed in the frame to move forward and rearward at a certain moving distance in a longitudinal direction of the frame; a driving means for moving the movable means forward and rearward; and at least one ultrasonic probe disposed to extend widthwise of the movable means, a ultrasonic wave transmission/reception surface of the ultrasonic probe being substantially flush with an upper surface of the movable means, the ultrasonic probe being fixed to the movable means at a position inward from longitudinal both ends of the movable means by a distance smaller than the moving distance of the movable means.